

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-22. (Cancelled)

Claim 23. (Currently Amended) A polyurethane solution containing alkoxy silane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having an hydroxyl number of from 8 to 200,
- b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) at least one compound containing at least one alkoxy silane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and
- e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),

in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxy silane groups must be at least 50 wt.% of all the incorporated alkoxy silane groups.

Claim 24. (Previously Presented) The polyurethane solution of Claim 23 wherein the polyurethane is reaction product of

- a) 40 to 92 wt.% of said at least one at least difunctional polyol,
- b) 7 to 50 wt.% of at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,

- c) 0.5 to 20 wt.% of at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500.
- d) 0.1 to 5 wt.% of at least one compound containing at least one alkoxysilane group and an isocyanate-reactive group and
- e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d).

wherein the percentages are based on weight of the polyurethane and the equivalents of component d) are at least 75% of the total equivalents of components d) and e).

Claim 25. (Previously Presented) The polyurethane solution of Claim 23 wherein the polyurethane is the reaction product of

- a) 47 to 88 wt.% of said at least one at least difunctional polyol,
- b) 10 to 40 wt.% of at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) 0.8 to 17 wt.% of at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) 0.2 to 3.0 wt.% of a compound containing an alkoxysilane group and an isocyanate-reactive group and
- e) 0-0.5 wt.% of a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),

wherein the percentages are based on weight of the polyurethane and the equivalents of component d) are at least 95% of the total equivalents of components d) and e).

Claim 26. (Previously Presented) The polyurethane solution of Claim 23 wherein at least 50 wt.% of component a) is at least one polycarbonate diol having a molecular weight of 900 to 2,500.

Claim 27. (Previously Presented) The polyurethane solution of Claim 23 wherein component a) contains 10 to 60 wt.% of at least one hydrophilic polyol and 23 to 50 wt.% of at least one non-hydrophilic polyol, wherein the percentages are based on the total solids content of the polyurethane, provided that the total amount of component a) is not more than 92 wt.% of the total solids content of the polyurethane.

Claim 28. (Previously Presented) The polyurethane solution of Claim 23 wherein at least 75 wt.% of component b) is isophorone diisocyanate.

Claim 29. (Currently Amended) The polyurethane solution of Claim 23 wherein the component b) comprises 2,4- and/or 2,6-diisocyanatotoluene and/or 4,4'-diisocyanatodiphenyl-methane.

Claim 30. (Previously Presented) The polyurethane solution of Claim 23 wherein component b) comprises at least one diisocyanate containing allophanate groups.

Claim 31. (Previously Presented) The polyurethane solution of Claim 23 wherein 2 to 16 wt.% of component c) is a hydrophilic difunctional compound containing salt groups.

Claim 32. (Previously Presented) The polyurethane solution of Claim 23 wherein component c) comprises a hydrophilic compound and a) comprises a hydrophilic polyol.

Claim 33. (Previously Presented) The polyurethane solution of Claim 23 wherein component c) comprises a positive amount up to 2 wt.%, based on the total solids content of the polyurethane, of a diamino-functional compound containing alkoxysilane groups.

Claim 34. (Previously Presented) The polyurethane solution of Claim 23 wherein component c) comprises 0.1 to 1.5 wt.%, based on the total solids content of the polyurethane, of hydrazine hydrate, adipic acid dihydrazide and/or the reaction product of 2 moles propylene carbonate with 1 mole hydrazine.

Claim 35. (Previously Presented) The polyurethane solution of Claim 23 wherein component d) comprises 0.3 to 1.3 wt.%, based on the total solids content of the polyurethane, of a compound containing an isocyanate-reactive group and at least one alkoxy silane group.

Claim 36. (Previously Presented) The polyurethane solution of Claim 23 wherein component d) comprises a monoamino-functional reaction product containing aspartic acid ester structures of a monoamino-functional alkoxy silane with 0.5 to 1.1 equivalents of a maleic acid alkyl ester.

Claim 37. (Cancelled)

Claim 38. (Previously Presented) The polyurethane solution of Claim 23 wherein component d) comprises 0.3 to 1.3 wt.%, based on the total solids content of the polyurethane, of a monoamino-functional alkoxy silane and component c) comprises 0.1 to 2.0 wt.%, based on the total solids content of the polyurethane, of a diamino-functional alkoxy silane, provided that the weight of terminal alkoxy silane groups is at least 50 wt.% of all the alkoxy silane groups incorporated.

Claim 39. (Previously Presented) A process for preparing the polyurethane solution of Claim 23 which comprises

- a) preparing an isocyanate-functional polyurethane in a one- or two-stage reaction from at least one polyol a), at least one difunctional polyisocyanate b), and at least one low molecular weight component c),
- b) subsequently reacting the product of step a) with at least one compound d) containing an alkoxy silane group and an isocyanate-reactive group and

optionally a monofunctional component e) to obtain a polyurethane with alkoxy silane structural units which no longer contains free isocyanate groups, and

- c) adding an organic solvent either before, during or after step a) in an amount such that the resulting polyurethane solution with alkoxy silane end groups has a solids content of 9 to 65 wt. %.

Claim 40. (Currently Amended) The process of Claim 39 which comprises

- a) reacting components a), b) and optionally c) in a one-stage reaction, optionally in the presence of suitable solvents, to obtain an isocyanate-functional polyurethane,
- b) ~~achieving the desired viscosity and molecular weight by~~ optionally adding a an additional amount of polyisocyanate b) and/or low molecular weight difunctional component c) until a desired viscosity and molecular weight is achieved, and
- c) chain-stopping the reaction by adding a monoamino-functional compound d) containing an alkoxy silane group.

Claim 41. (Previously Presented) A paint, coating, sealant or adhesive compositions containing the polyurethane solution of Claim 23.

Claim 42. (Previously Presented) A plastic coated with the polyurethane solution of Claim 23.

Claim 43. (Previously Presented) A textile or leather coated with the polyurethane solution of Claim 23.

Claim 44. (Previously Presented) A textile coated with the polyurethane solution of Claim 23, wherein the coating is permeable to water vapor.

Claim 45. (Currently Amended) A polyurethane solution containing alkoxy silane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having an hydroxyl number of from 8 to 200 and a molecular weight of up to 16,000,
 - b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
 - c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
 - d) at least one compound containing at least one alkoxy silane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}-(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and
 - e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),
- in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxy silane groups must be at least 50 wt. % of all the incorporated alkoxy silane groups.

Claim 46. (Currently Amended) A polyurethane solution containing alkoxy silane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having a molecular weight of 561 to 16,000,
- b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) at least one compound containing at least one alkoxy silane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}-(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and

- e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d), in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxysilane groups must be at least 50 wt.% of all the incorporated alkoxysilane groups